This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method for executing a query, comprising:

matching [[a]] the query to an outlier materialized query table that stores exception data, wherein the query contains a correlation predicate, by translating the correlation predicate into a join predicate in a context of the outlier materialized query table and, when the translated join predicate matches the join predicate in the outlier materialized query table, deriving a new predicate for the correlation predicate in a child query block using a source predicate on a quantifier of a parent query block;

searching the query for a source predicate, including searching the parent query block for the source predicate;

searching an outlier predicate in the outlier materialized query table that corresponds to the source predicate for a target column that corresponds to a source column in the source predicate;

deriving a new range predicate based on the target column; and

introducing the new range predicate into the query, wherein the query is executed to retrieve data from one or more data stores.

2. (Original) The method of claim 1, further comprising:

merging the new range predicate into the query.

3. (Previously Presented) The method of claim 1, further comprising:

generating a bounds view from source predicate information and range binding information collected for the target column, wherein the bounds view computes a lower bound and an upper bound for the new range predicate, and wherein the bounds view ~~may be~~ is capable of being generated using at least one of a range multiplying technique or a range stretching technique.

4. (Original) The method of claim 1, wherein matching the query to an outlier materialized query table further comprises:

creating a first query graph model representation of the query;

creating a second query graph model representation of the outlier materialized query table; and

comparing the first query graph model and the second query graph model.

5. (Original) The method of claim 1, wherein there is a join in the outlier materialized query table and wherein matching further comprises:

determining that join predicates other than the outlier predicate in the outlier materialized query table have matching predicates in the query.

6. (Original) The method of claim 5, wherein the new range predicate is derived by selecting the target column from base tables involved in the join.

7. (Original) The method of claim 6, wherein the target column is from a table other than the one in which the source column resides.

8. (Original) The method of claim 6, wherein the target column is from a same table as the one in which the source column resides.

9. (Cancelled)

10. (Cancelled)

11. (Currently Amended) An article of manufacture comprising one of hardware logic and a computer readable storage medium including a program for executing a query, wherein the hardware logic or program causes operations to be performed, the operations comprising:

matching [[a]] the query to an outlier materialized query table that stores exception data, wherein the query contains a correlation predicate, by translating the correlation predicate into a join predicate in a context of the outlier materialized query table and, when the translated join

predicate matches the join predicate in the outlier materialized query table, deriving a new predicate for the correlation predicate in a child query block using a source predicate on a quantifier of a parent query block;

searching the query for a source predicate, including searching the parent query block for the source predicate;

searching an outlier predicate in the outlier materialized query table that corresponds to the source predicate for a target column that corresponds to a source column in the source predicate;

deriving a new range predicate based on the target column; and

introducing the new range predicate into the query, wherein the query is executed to retrieve data from one or more data stores.

12. (Original) The article of manufacture of claim 11, wherein the operations further comprise:

merging the new range predicate into the query.

13. (Previously Presented) The article of manufacture of claim 11, wherein the operations further comprise:

generating a bounds view from source predicate information and range binding information collected for the target column, wherein the bounds view computes a lower bound and an upper bound for the new range predicate, and wherein the bounds view ~~may be~~ is capable of being generated using at least one of a range multiplying technique or a range stretching technique.

14. (Original) The article of manufacture of claim 11, wherein the operations for matching the query to an outlier materialized query table further comprise:

creating a first query graph model representation of the query;

creating a second query graph model representation of the outlier materialized query table; and

comparing the first query graph model and the second query graph model.

15. (Original) The article of manufacture of claim 11, wherein there is a join in the outlier materialized query table and wherein the operations for matching further comprise determining that join predicates other than the outlier predicate in the outlier materialized query table have matching predicates in the query.

16. (Original) The article of manufacture of claim 15, wherein the new range predicate is derived by selecting the target column from base tables involved in the join.

17. (Original) The article of manufacture of claim 16, wherein the target column is from a table other than a table in which the source column resides.

18. (Original) The article of manufacture of claim 16, wherein the target column is from a same table as the one in which the source column resides.

19. (Cancelled)

20. (Cancelled)

21. (Currently Amended) A system for executing a query, comprising:

a processor;

means for matching [[a]] the query to an outlier materialized query table that stores exception data, wherein the query contains a correlation predicate, by translating the correlation predicate into a join predicate in a context of the outlier materialized query table and, when the translated join predicate matches the join predicate in the outlier materialized query table, deriving a new predicate for the correlation predicate in a child query block using a source predicate on a quantifier of a parent query block;

means for searching the query for a source predicate, including searching the parent query block for the source predicate;

means for searching an outlier predicate in the outlier materialized query table that corresponds to the source predicate for a target column that corresponds to a source column in the source predicate;

means for deriving a new range predicate based on the target column; and

means for introducing the new range predicate into the query, wherein the query is executed to retrieve data from one or more data stores.